SUBJECT: Liquidambar Street Tree Removal

BUDGET SUPPLEMENT REQUEST SUMMARY

At the Fiscal Issues Workshop special meeting on January 30, 2006 the Council forwarded the Liquidambar Street Trees budget issue on to the City Manager for consideration as part of the recommended FY 2006/2007 Budget. This Budget Supplement proposes \$50,000 in additional ongoing funding to allow for an increase in the removal and replacement of Liquidambar street trees by approximately forty-two trees per year. With this increase the total number of Liquidambar removed and replaced by the City will increase to about seventy trees per year. The 20-year impact is a cost increase of \$1,253,056 with inflation.

With the current Liquidambar street tree inventory of 3,791 trees the removal and replacement of all Liquidambar street trees will take fifty-four years if this supplement is approved. This replacement rate could increase as the current Liquidambar inventory gets older and the failure rate naturally increases with age.

This increase in Liquidambar street tree replacements does not significantly impact the entire Sunnyvale street tree inventory of 36,917 trees.

BACKGROUND

On August 9, 2005 City Council acted on RTC 05-228 – Liquidambar Street Trees – Nuisance Fruit Problem – Study Issue. Two motions were passed associated with this RTC. The first motion approved Alternative #7 which allowed property owners the ability to request a permit to remove the Liquidambar street tree adjacent to their home and replace it with an alternative species at their expense. The second motion directed staff to submit a budget supplement for Council budget consideration in the future.

On January 24, 2006 Council reviewed and received public comment on RTC 06-035 – Public Hearing on Budget Issues for Consideration in the City Manager's Recommendation FY 2006-07 Budget and Long Term Financial Plan. At the Fiscal Issues Workshop special meeting on January 30, 2006 the Council forwarded this budget issue on to the City Manager for consideration as part of the recommended FY 2006/2007 Budget.

EXISTING POLICY

City Policy for street tree removal is set forth in Sunnyvale Municipal Code Chapter 13.16.060. Permit Required (See Attachment A.); and

Chapter 13.16.080. Removal of Damaged Trees (See Attachment B.) Street trees that become damaged or destroyed from any cause which in the opinion of the superintendent results in such a tree becoming an immediate threat to the safety of life or property shall be removed by the City.

DISCUSSION

The Street Tree Services program (218) funds the removal and replacement of damaged street trees. Activity 218220 – Tree Removal accounts for street tree removals. The actual number of street trees removed varies from year to year but an average of 350 trees are funded for removal each year.

This budget supplement creates a new service. Currently only trees recognized by the City Arborist as hazardous and an eminent threat of failure by either major limb, trunk or root failure are removed. Healthy trees or trees with correctable defects are not removed.

As a result of Council action on RTC 05-0228, the fruit balls generated by the street tree species *Liquidambar styraciflua* are considered a hazardous nuisance. Property owners can request a permit to remove the Liquidambar street tree adjacent to their home and replace it with an alternative species at their expense.

For the proposed \$50,000 budget supplement approximately forty-two (42) Liquidambar street trees can be removed and replaced with an alternative tree species at the City's expense. As of April 2006 the Sunnyvale street tree inventory of Liquidambar trees is 3,791. The tree and stump removal will need to be done by contract. The cost for Liquidambar tree removal can range between \$650 to \$2,200 per tree depending on the size of the tree and other site conditions.

SERVICE LEVEL IMPACT

At the current annual average of 350 street trees (all species) removed and replaced per year the addition of 42 additional street trees removed will not significantly change the existing service levels. With the street tree inventory at 36,917, the replacement rate will increase around a tenth of a percent (0.11%) per year.

Of the Liquidambar trees in the inventory the removal rate would increase from around twenty-eight Liquidambars to around seventy trees per year. This

represents a loss rate increase of 1.11% over what is removed now, ie. 70 removed and replaced out of 3,791 total Liquidambars. At a rate of about 70 trees removed per year it would take fifty-four years to remove and replace all the current Liquidambar street trees.

FISCAL IMPACT

The Street Tree Services program (218) budget will increase by \$50,000. The proposed budget for Fiscal Year 2006/07 for Program 218 would increase from \$1,343,029 to \$1,393,029. This is an ongoing operating cost increase to the General Fund. The 20-year impact is a cost increase of \$1,253,056 with inflation.

CONCLUSION

The addition of \$50,000 to the Street Tree Services program will significantly increase the removal and replacement of mature Liquidambar street trees. With a natural loss of Liquidambar street trees now at around twenty-eight trees per year it will take 135 years for all Liquidambars to be replaced. By increasing the removal and replacement by forty-two more trees per year, the replacement period is reduced to around fifty-four years.

From an arboricultural standpoint, trees in urban/suburban conditions live much shorter lives than trees in their native locations. The natural failure rate of the Liquidambar street tree is expected to increase as they age. Even though the numerical calculation indicates that the natural loss of Liquidambars would be 135 years, it is expected that the current Liquidambars in Sunnyvale will be replaced within seventy-five years. The natural loss rate is expected to increase with time.

In the short term, for the next ten to twenty years, the removal and replacement of Liquidambars at seventy trees per year will have little impact on the total inventory of street trees in the City of Sunnyvale.

Prepared by:	
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Reviewed by:	
Mary J. Bradley Director of Finance	
City Manager's Recommenda	<u>tion</u>
[] Approve Budget Supplemen	t for funding
[] Do Not Approve Budget Sup	plement for funding
Amy Chan City Manager	

Attachments:

Attachment A – SMC 13.16.060 – Permits Required

Attachment B – SMC 13.16.080 – Removal of Damaged Trees

Attachment C – Budget Supplement Detail

13.16.060. Permits required.

- (a) Planting. It is unlawful for any person to plant or set out any tree within the public right-of-way without first procuring a permit from the superintendent.
- (b) Maintenance and Removal. It is unlawful for any person to trim, prune, spray, fertilize, remove, cut above ground, or otherwise disturb any city tree without first procuring a permit from the superintendent. The permit shall be issued when the superintendent determines that the required work is necessary and that the proposed method is in accordance with generally accepted arboricultural specifications and standards of practice.
- (c) Construction. It is unlawful for any person to make any excavation, place any fill, compact the soil, or construct any structure, walkway, driveway, pavement or public utility within fifteen feet of any city tree without first obtaining a permit for such work from the superintendent and conducting such work in accordance with such permit. As a condition of issuing such permit, the superintendent shall require that the work be done in accordance with such generally accepted arboricultural specifications and standards of practice necessary to protect the vitality of the tree.

(d) Permits.

- (1) Applications for permits must be made at least forty-eight hours in advance of the time the work is to be started.
- (2) The application shall contain, but shall not be limited to, the following:
 - (A) The number of trees to be planted or set out, the location, grade, size, quality, species, cultivar or variety of each tree, the method of planting, and such other information as the superintendent may require;
 - (B) The number and kinds of trees to be sprayed, fertilized, trimmed/pruned, removed, relocated or otherwise preserved, the kind of treatment to be administered, the composition of the spray or fertilizer material to be applied, and such other information as the superintendent may require;

- (C) The written agreement of each applicant for a permit that the applicant will comply with the requirements, regulations and standards of this chapter;
- (D) The time schedule for the proposed work; and
- (E) Such other information as the superintendent deems necessary. (Ord. 2374-91 § 2 (part)).

13.16.080. Removal of damaged trees.

- (a) Official or unofficial city trees shall be removed immediately by the city in the event such a tree is damaged or destroyed from any cause which in the opinion of the superintendent results in such a tree becoming an immediate threat to the safety of life or property.
- (b) City trees shall be ordered removed when the superintendent finds such action necessary to prevent a hazard to public safety or to prevent the spread of disease or insects to public trees and places.
 - (1) The property owner who is notified of such order shall have the right within five days from the service of the order to file a written appeal with the director of public works.
 - (2) The director may revoke or modify the order if the director finds that the removal of the tree is not necessary to prevent a hazard to public safety or to prevent the spread of disease or insects to public trees and places.
 - (3) The total cost of the removal of city trees shall be borne by the city. An official city tree shall be planted, when practical, as a replacement in a location approved by the superintendent. The cost of the official city tree replacement shall be borne by the city.
- (c) Unofficial city trees ordered removed shall be allowed to remain if each of the following conditions is complied with:
 - (1) The property owner obtains a permit to prune the tree above and below ground; the property owner provides the city a signed written statement satisfactory to the city indemnifying and holding harmless the city from any liability or loss from the continued maintenance of the tree.
 - (2) The total cost of removing the unofficial city trees, when it becomes necessary in the future, shall be paid by the property owner or successor in title, which obligation shall be evidenced by a written document satisfactory to the city and recorded in the office of the county recorder.
- (d) The superintendent shall initiate a tree replacement program in those areas of the city in which city trees are required to be removed. (Ord. 2374-91 § 2 (part)).

BUDGET SUPPLEMENT FORM Fiscal Year 2006/2007

BUDGET SUPPLEMENT #1: LIQUIDAMBAR STREET TREE REMOVAL

FISCAL IMPACT :	\$50,000

TOTAL PROPOSED COSTS (Savings):	\$50,000
TOTAL PROPOSED REVENUES:	\$0
NET IMPACT :	\$50,000

20-YEAR IMPACT :	\$1,253,056
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DESCRIPTION OF THE TYPE OF RESOURCES AND THE PURPOSE FOR WHICH THEY ARE BEING REQUESTED:

Additional funds to increase the number of Liquidambar street trees being removed and/or replaced.

CURRENT		PROPOSED				
PROGRAM 218 – STREET TREE SERVICES						
STATEMENT		STATEMENT				
Promote the safety, environmental functionality and aesthetics of the City's street trees for residents, visitors and the business community		No Proposed Changes				
PROGRAM MEASURES						
MEASURE	TARGET	Γ MEASURE TARG				
Remove and replace street trees that are damaged, diseased, dead or otherwise have become hazardous as determined by the City Arborist.	98%	No Proposed Changes				
SERVICE DELIVERY PLAN 218-02						
DESCRIPTION OF SERVICE DELIVERY PLAN		DESCRIPTION OF SERVICE DELIVERY PLAN				
Provide street trees that enhance the aesthetics, environmental quality and safety of the City		No Proposed Changes				

CURRENT			PROPOSED				
	ACTIVITIES/PRODUCTS						
ACTIVITY#	DESCRIPTION	PRODUCT TYPE	PRODUCTS	ACTIVITY#	DESCRIPTION	PRODUCT TYPE	PRODUCTS
218200	Replacement Tree Planting	A Tree Planted	350	218200	Replacement Tree Planting	A Tree Planted	392
218220	Tree Removal Down to Stump	A Tree Felled	350	218220	Tree Removal Down to Stump	A Tree Felled	392
218230	Tree Stump Removal (by Contract)	A Tree Stump Removed	350	218230	Tree Stump Removal (by Contract)	A Tree Stump Removed	392
FISCAL IMPACT							
TOTAL SDP COSTS – CURRENT \$257,236			TOTAL SDP C	COSTS – PROPOSED		\$307,236	

ACTIVITY DETAIL COST, HOURS AND PRODUCTS

SERVICE DELIVERY PLAN 218-02

PERSONNEL

ACTIVITY #	JOB CODE	CLASSIFICATION	WORK HOURS	PRODUCTS	COSTS
218200	5650	Senior Public Works Leader	8.80	42	\$546
218220	5650	Senior Public Works Leader	10.60	42	\$658
218230	5650	Senior Public Works Leader	10.60	42	\$658
		TOTALS	30.00	126	\$1,862

PURCHASED GOODS AND SERVICES

ACTIVITY #	OBJECT LEVEL	OBJECT NAME	COSTS
218200	5165	Services to Maintain Land Improvements	\$6,138
218220	5165	Services to Maintain Land Improvements	\$33,600
218230	5165	Services to Maintain Land Improvements	\$8,400
		TOTAL	\$48,138

GRAND TOTAL \$50,000